WO 2004/093471

PCT/US2004/009734

CLAIMS

1. A communications network comprising:

two or more cell sites for communication with wireless terminals, at least one of the cell sites having multiple receive antennas; and

a central site having one or more interface controllers and a switch system through which the controllers are connected to the cell sites;

wherein for each controller in communication with a wireless terminal, a cell site is selected for reception of signals from the terminal, and for each selected cell site having more than one receive antenna, an antenna within the site is selected for reception from the terminal.

10

5

7

2. A network according to claim 1 further comprising:

a cell selector in the central site that uses a diversity technique to select cell sites for reception from the wireless terminals and connects the selected sites to respective controllers through the switch.

15

3. A network according to claim 1 further comprising:

an antenna selector in each controller that uses a diversity technique to select an antenna within each cell site having multiple receive antennas.

- 20 4. A network according to claim 1 wherein the interface controllers include transceivers that transmit and receive RF signals according to respective protocols that are used by the wireless terminals
- 5. A network according to claim 1 wherein the central site is connected to at least some of the cell sites via optical fibres.